ELSEVIER

Surface Science 376 (1997) 423–425

surface science

Author index

Ahopelto, J., see Taskinen 376 (1997) 60
Aizawa, N., Y. Homma and M. Tomita, Effect of surfactant on Ge crystallization on Si in solid phase epitaxy 376 (1997) L419
Akutsu, N. and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92
Akutsu, Y., see Akutsu 376 (1997) 92
Aoyama, T., see Tanemura 376 (1997) 163
Asmussen, B., see Strzelczyk 376 (1997) 339
Asscher, M., see Verhoef 376 (1997) 389
Asscher, M., see Verhoef 376 (1997) 395
Avery, A.R., E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397

Baba, Y., K. Yoshii and T.A. Sasaki, Desorption of molecular and atomic fragment-ions from solid CCl_4 and $SiCl_4$ by resonant photoexcitation at chlorine K-edge 376 (1997) 330
Bartels, L., see Neuhold 376 (1997) 1
Bęben, J., see Dudek 376 (1997) 418
Behrend, J., see Oigawa 376 (1997) 185
Bittner, A.M., J. Wintterlin and G. Ertl, Strain relief during metal-on-metal electrodeposition: a scanning tunneling microscopy study of copper growth on Pt(100) 376 (1997) 267
Blackman, J.A., see Mulheran 376 (1997) 403
Böttcher, A., S. Fichtner-Endruschat and H. Niehus, Surface electronic properties of Cs-fullerides 376 (1997) 151
Bromann, K., see Röder 376 (1997) 13
Brune, H., see Röder 376 (1997) 13
Bullemer, B., see Kulakov 376 (1997) L414

Cháb, V., see Chvoj 376 (1997) 205
Chen, X.H., J.C. Polyani and D. Rogers, Photoetching of Si(111)-(7 × 7) studied by STM 376 (1997) 77
Chiang, T.-C., see Miller 376 (1997) 32
Chini, T.K., see Tanemura 376 (1997) 163
Christmann, K., see Parschau 376 (1997) 133
Chvoj, Z., H. Conrad and V. Cháb, Thermodynamics of adatoms diffusing on a surface with two different sites: a new type of phase transition 376 (1997) 205
Conrad, H., see Chvoj 376 (1997) 205
Courths, R., S. Hüfner, P. Kemkes and G. Wiesen, Electronic structure investigation of Cu(110), Ag(110) and Ni(110) surfaces covered with chemisorbed oxygen up to half a monolayer 376 (1997) 43
Cvetko, D., see Over 376 (1997) 177

Däweritz, L., see Oigawa 376 (1997) 185
De Renzi, V., see Over 376 (1997) 177
Dixon, R., see Jones 376 (1997) 367
Doi, T., H. Nakahara, M. Ichikawa and S. Hosoki, Observation of Si(111) surface steps from scanning microscope images of the sample absorption current 376 (1997) 87
Dötsch, B., see Kottcke 376 (1997) 319
Driver, S.M., see Knight 376 (1997) 374
Dudek, M.R. and J. Bęben, Surface strip spreading for repulsive adatoms 376 (1997) 418

Egdell, R.G., see Jones 376 (1997) 367
Erdös, D., see Nedelmann 376 (1997) 113
Ertl, G., see Over 376 (1997) 177
Ertl, G., see Bittner 376 (1997) 267

Fichtner-Endruschat, S., see Böttcher 376 (1997) 151
Fischer, B., see Nedelmann 376 (1997) 113
Floreano, L., see Over 376 (1997) 177
Foord, J.S., see Jones 376 (1997) 367
Fujinuma, H., see Sumiya 376 (1997) 192

Gillan, M.J., see Kantorovich 376 (1997) 169
Gotter, R., see Over 376 (1997) 177

Haack, N., see Strzelczyk 376 (1997) 339
Hammer, L., see Kottcke 376 (1997) 319
Han, J., D. Jeon and Y. Kuk, Surface crystalline gold silicide formation on the Au(100) surface 376 (1997) 237
Hansen, E.D., see Miller 376 (1997) 32
Hasegawa, S., see Jiang 376 (1997) 69
He, H., Y. Okawa and K. Tanaka, Hydrogenation of carbidic carbon on the Ni(100) surface 376 (1997) 310
Heinz, K., see Kottcke 376 (1997) 319
Heinz, K., see Kottcke 376 (1997) 352
Henzler, M., see Nedelmann 376 (1997) 113
Henzler, M., see Müller 376 (1997) 123

Homma, Y., see Aizawa 376 (1997) L419
Horn, K., see Neuhold 376 (1997) 1
Hosoki, S., see Doi 376 (1997) 87
Hoster, H., see Kulakov 376 (1997) L414
Huang, H.H., X. Jiang, Z. Zou and G.Q. Xu, Interaction of atomic hydrogen with potassium on MgO(100) 376 (1997) 245
Hüfner, S., see Courths 376 (1997) 43

Ichikawa, M., see Doi 376 (1997) 87
Illas, F., S. Zurita, A.M. Márquez and J. Rubio, On the bonding mechanism of CO to Pt(111) and its effect on the vibrational frequency of chemisorbed CO 376 (1997) 279
Ino, S., see Jiang 376 (1997) 69

Jäger, I., The kinetics of surface segregation in thin films: theoretical considerations and the determination of diffusion data 376 (1997) 219
Jeon, D., see Han 376 (1997) 237
Jiang, C.-S., X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69
Jiang, X., see Huang 376 (1997) 245
Joachim, C., see Okon 376 (1997) L409
Johansson, S., see Rinnemo 376 (1997) 297
Jones, F.H., R. Dixon, J.S. Foord, R.G. Egdell and J.B. Pethica, The surface structure of $SnO_2(110)(4 \times 1)$ revealed by scanning tunneling microscopy 376 (1997) 367
Jones, T.S., see Avery 376 (1997) L397
Jurczyszyn, L. and M. Stęślicka, A new approach to the study of electronic properties of image resonances at clean and Na-covered Al(001) surfaces 376 (1997) L424

Kantorovich, L.N. and M.J. Gillan, The energetics of N_2O dissociation on CaO(001) 376 (1997) 169
Kardinal, I., F.P. Netzer and M.G. Ramsey, A multiplicity of CN bonding configurations on Ni(110) 376 (1997) 229
Kasemo, B., see Rinnemo 376 (1997) 297
Kemkes, P., see Courths 376 (1997) 43
Kern, K., see Röder 376 (1997) 13
Kern, K., see Nedelmann 376 (1997) 113
Knight, P.J., S.M. Driver and D.P. Woodruff, Scanning tunnelling microscopy investigation of the oxygen-induced faceting and "nano-faceting" of a vicinal copper surface 376 (1997) 374
Kottcke, M., B. Dötsch, L. Hammer, K. Heinz, K. Müller and D.M. Zehner, Deep layer oscillatory segregation and relaxation of substitutionally disordered $Mo_xRe_{1-x}(100)$ surfaces 376 (1997) 319
Kottcke, M. and K. Heinz, A new approach to automated structure optimization in LEED intensity analysis 376 (1997) 352
Kuk, Y., see Han 376 (1997) 237
Kulakov, M.A., H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1×1–7×7 surface phase transition 376 (1997) L414
Kulginov, D., see Rinnemo 376 (1997) 297

Larese, J.Z., see Strzelczyk 376 (1997) 339
Latham, R.V., see Xu 376 (1997) 411
Lipsanen, H., see Taskinen 376 (1997) 60
Lund, C.P. and S.M. Thurgate, Analysis of the $M_{4,5}$-$N_{4,5}N_{4,5}$ spectrum of Ag by Auger photoelectron coincidence spectroscopy 376 (1997) L403

Márquez, A.M., see Illas 376 (1997) 279
Materer, N., see Yoon 376 (1997) 254
McMahon, W.E., see Miller 376 (1997) 32
Miller, T., E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32
Miura, T., see Sumiya 376 (1997) 192
Morgante, A., see Over 376 (1997) 177
Mulheran, P.A. and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403
Müller, B., see Nedelmann 376 (1997) 113
Müller, B.H., Th. Schmidt and M. Henzler, Growth and melting of a Pb monolayer on Cu(111) 376 (1997) 123
Müller, K., see Kottcke 376 (1997) 319

Nakahara, H., see Doi 376 (1997) 87
Nedelmann, L., B. Müller, B. Fischer, K. Kern, D. Erdös, J. Wollschläger and M. Henzler, A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100) 376 (1997) 113
Netzer, F.P., see Kardinal 376 (1997) 229
Neuhold, G., L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1
Niehus, H., see Böttcher 376 (1997) 151

Oigawa, H., M. Wassermeier, J. Behrend, L. Däweritz and K.H. Ploog, Reconstruction of the GaAs(001) surface induced by submonolayer Be deposition 376 (1997) 185
Okawa, Y., see He 376 (1997) 310
Okon, J.C. and C. Joachim, Chemisorption of a Ag atom on a Si(100)2×1 surface: local surface deformation 376 (1997) L409
Okuyama, F., see Tanemura 376 (1997) 163
Otani, A., see Tanemura 376 (1997) 163
Over, H., S. Schwegmann, G. Ertl, D. Cvetko, V. De Renzi, L. Floreano, R. Gotter, A. Morgante, M. Peloi, F. Tommasini and S. Zennaro, Temperature behavior of the $(\sqrt{3} \times \sqrt{3})$R30°-1CO and the (2×2)-3CO overlayers on Rh(111): a combined HAS and LEED investigation 376 (1997) 177

Paggel, J.J., see Neuhold 376 (1997) 1
Parschau, M., D. Schlatterbeck and K. Christmann, Nucleation and growth of silver films on a rhenium (0001) surface: a combined STM and LEED study 376 (1997) 133
Peloi, M., see Over 376 (1997) 177
Pethica, J.B., see Jones 376 (1997) 367

Ploog, K.H., see Oigawa 376 (1997) 185
Polyani, J.C., see Chen 376 (1997) 77
Press, W., see Strzelczyk 376 (1997) 339

Ramsey, M.G., see Kardinal 376 (1997) 229
Ren, S., see Zhuang 376 (1997) L429
Rinnemo, M., D. Kulginov, S. Johansson, K.L. Wong, V.P. Zhdanov and B. Kasemo, Catalytic ignition in the $CO–O_2$ reaction on platinum: experiment and simulations 376 (1997) 297
Röder, H., K. Bromann, H. Brune and K. Kern, Strain mediated two-dimensional growth kinetics in metal heteroepitaxy: Ag/Pt(111) 376 (1997) 13
Rogers, D., see Chen 376 (1997) 77
Rubio, J., see Illas 376 (1997) 279

Salmeron, M., see Yoon 376 (1997) 254
Sasaki, T.A., see Baba 376 (1997) 330
Schlatterbeck, D., see Parschau 376 (1997) 133
Schmidt, Th., see Müller 376 (1997) 123
Schwegmann, S., see Over 376 (1997) 177
Somorjai, G.A., see Yoon 376 (1997) 254
Sopanen, M., see Taskinen 376 (1997) 60
Stęślicka, M., see Jurczyszyn 376 (1997) L424
Strzelczyk, M., N. Haack, B. Asmussen, J. Süßenbach, W. Press and J.Z. Larese, Structures and phase diagrams of tetramethyltin and tetramethyllead adsorbed on graphite 376 (1997) 339
Sumiya, T., T. Miura, H. Fujinuma and S. Tanaka, Surface reconstruction in CaF_2/Si(001) investigated by scanning tunneling microscopy 376 (1997) 192
Süßenbach, J., see Strzelczyk 376 (1997) 339

Tabe, M. and T. Yamamoto, Initial stages of nitridation of Si(111) surfaces: X-ray photoelectron spectroscopy and scanning tunneling microscopy studies 376 (1997) 99
Tanaka, K., see He 376 (1997) 310
Tanaka, S., see Sumiya 376 (1997) 192
Tanemura, M., T. Aoyama, A. Otani, M. Ukita, F. Okuyama and T.K. Chini, Angular distribution of In and P particles sputtered from InP by inert-gas ion bombardment 376 (1997) 163
Taskinen, M., M. Sopanen, H. Lipsanen, J. Tulkki, T. Tuomi and J. Ahopelto, Self-organized InAs islands on (100) InP by metalorganic vapor-phase epitaxy 376 (1997) 60
Thurgate, S.M., see Lund 376 (1997) L403
Tok, E.S., see Avery 376 (1997) L397
Tomita, M., see Aizawa 376 (1997) L419
Tommasini, F., see Over 376 (1997) 177
Tong, X., see Jiang 376 (1997) 69
Tossell, J.A., A theoretical study of the photoinduced desorption of I^- from a CF_3I dimer 376 (1997) L434
Tulkki, J., see Taskinen 376 (1997) 60
Tuomi, T., see Taskinen 376 (1997) 60

Ukita, M., see Tanemura 376 (1997) 163

Van Hove, M.A., see Yoon 376 (1997) 254
Verhoef, R.W. and M. Asscher, Effect of lateral interactions on coverage grating formation on surfaces 376 (1997) 389
Verhoef, R.W. and M. Asscher, Diffusion on surfaces using laser diffraction: effect of adsorbate lateral interactions 376 (1997) 395

Wang, X., see Zhuang 376 (1997) L429
Wang, Y., see Zhuang 376 (1997) L429
Wassermeier, M., see Oigawa 376 (1997) 185
Wei, X., see Zhuang 376 (1997) L429
Wiesen, G., see Courths 376 (1997) 43
Wintterlin, J., see Bittner 376 (1997) 267
Wollschläger, J., see Nedelmann 376 (1997) 113
Wong, K.L., see Rinnemo 376 (1997) 297
Woodruff, D.P., see Knight 376 (1997) 374

Xu, G.Q., see Huang 376 (1997) 245
Xu, N.S. and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Yamamoto, T., see Tabe 376 (1997) 99
Yoon, H.A., N. Materer, M. Salmeron, M.A. Van Hove and G.A. Somorjai, Coverage-dependent structures of sulfur on Pt(111) studied by low-energy electron diffraction (LEED) and scanning tunneling microscopy (STM) 376 (1997) 254
Yoshii, K., see Baba 376 (1997) 330

Zehner, D.M., see Kottcke 376 (1997) 319
Zennaro, S., see Over 376 (1997) 177
Zhai, R., see Zhuang 376 (1997) L429
Zhang, Z., see Kulakov 376 (1997) L414
Zhdanov, V.P., see Rinnemo 376 (1997) 297
Zhuang, S., X. Wang, X. Wei, Y. Wang, S. Ren and R. Zhai, The adsorption and reaction of cyclohexanone on the Pt(111) surface 376 (1997) L429
Zou, Z., see Huang 376 (1997) 245
Zurita, S., see Illas 376 (1997) 279

ELSEVIER

Surface Science 376 (1997) 426–432

surface science

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Ab initio quantum chemical methods and calculations

J.A. Tossell, A theoretical study of the photoinduced desorption of I^- from a CF_3I dimer 376 (1997) L434

F. Illas, S. Zurita, A.M. Márquez and J. Rubio, On the bonding mechanism of CO to Pt(111) and its effect on the vibrational frequency of chemisorbed CO 376 (1997) 279

Atom–solid interactions, scattering, diffraction

H. Over, S. Schwegmann, G. Ertl, D. Cvetko, V. De Renzi, L. Floreano, R. Gotter, A. Morgante, M. Peloi, F. Tommasini and S. Zennaro, Temperature behavior of the $(\sqrt{3}\times\sqrt{3})$R30°-1CO and the (2×2)-3CO overlayers on Rh(111): a combined HAS and LEED investigation 376 (1997) 177

Computer simulations

M. Rinnemo, D. Kulginov, S. Johansson, K.L. Wong, V.P. Zhdanov and B. Kasemo, Catalytic ignition in the CO–O_2 reaction on platinum: experiment and simulations 376 (1997) 297

P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403

M.R. Dudek and J. Bęben, Surface strip spreading for repulsive adatoms 376 (1997) 418

Density functional calculations

R. Courths, S. Hüfner, P. Kemkes and G. Wiesen, Electronic structure investigation of Cu(110), Ag(110) and Ni(110) surfaces covered with chemisorbed oxygen up to half a monolayer 376 (1997) 43

L.N. Kantorovich and M.J. Gillan, The energetics of N_2O dissociation on CaO(001) 376 (1997) 169

Electron density, excitation spectra calculations

T. Miller, E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32

Electron–solid interactions, scattering, diffraction

M. Kottcke, B. Dötsch, L. Hammer, K. Heinz, K. Müller and D.M. Zehner, Deep layer oscillatory segregation and relaxation of substitutionally disordered Mo_xRe_{1-x}(100) surfaces 376 (1997) 319

Equilibrium thermodynamics and statistical mechanics

N. Akutsu and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92

Green's function methods

L. Jurczyszyn and M. Stęślicka, A new approach to the study of electronic properties of image resonances at clean and Na-covered Al(001) surfaces 376 (1997) L424

Ising models

N. Akutsu and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92

Models of non-equilibrium phenomena

P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403

Models of surface kinetics

G. Neuhold, L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1

Z. Chvoj, H. Conrad and V. Cháb, Thermodynamics of adatoms diffusing on a surface with two different sites: a new type of phase transition 376 (1997) 205

M. Rinnemo, D. Kulginov, S. Johansson, K.L. Wong, V.P. Zhdanov and B. Kasemo, Catalytic ignition in the CO–O2 reaction on platinum: experiment and simulations 376 (1997) 297

P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403

Non-equilibrium thermodynamics and statistical mechanics

Z. Chvoj, H. Conrad and V. Cháb, Thermodynamics of adatoms diffusing on a surface with two different sites: a new type of phase transition 376 (1997) 205

Semi-empirical models and model calculations

J.C. Okon and C. Joachim, Chemisorption of a Ag atom on a Si(100)2 × 1 surface: local surface deformation 376 (1997) L409

T. Miller, E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32

R. Courths, S. Hüfner, P. Kemkes and G. Wiesen, Electronic structure investigation of Cu(110), Ag(110) and Ni(110) surfaces covered with chemisorbed oxygen up to half a monolayer 376 (1997) 43

I. Jäger, The kinetics of surface segregation in thin films: theoretical considerations and the determination of diffusion data 376 (1997) 219

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Atomic force microscopy

M. Taskinen, M. Sopanen, H. Lipsanen, J. Tulkki, T. Tuomi and J. Ahopelto, Self-organized InAs islands on (100) InP by metalorganic vapor-phase epitaxy 376 (1997) 60

Auger electron spectroscopy

C.P. Lund and S.M. Thurgate, Analysis of the $M_{4,5}$-$N_{4,5}N_{4,5}$ spectrum of Ag by Auger photoelectron coincidence spectroscopy 376 (1997) L403

Y. Baba, K. Yoshii and T.A. Sasaki, Desorption of molecular and atomic fragment-ions from solid CCl4 and SiCl4 by resonant photoexcitation at chlorine K-edge 376 (1997) 330

Chemical vapor deposition

M. Taskinen, M. Sopanen, H. Lipsanen, J. Tulkki, T. Tuomi and J. Ahopelto, Self-organized InAs islands on (100) InP by metalorganic vapor-phase epitaxy 376 (1997) 60

Desorption induced by electronic transitions (DIET)

Photon stimulated desorption (PSD)

J.A. Tossell, A theoretical study of the photoinduced desorption of I^- from a CF3I dimer 376 (1997) L434

Y. Baba, K. Yoshii and T.A. Sasaki, Desorption of molecular and atomic fragment-ions from solid CCl4 and SiCl4 by resonant photoexcitation at chlorine K-edge 376 (1997) 330

Electron emission measurements

Field emission

N.S. Xu and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Photoemission (total yield)

N.S. Xu and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Electron energy loss spectroscopy

S. Zhuang, X. Wang, X. Wei, Y. Wang, S. Ren and R. Zhai, The adsorption and reaction of cyclohexanone on the Pt(111) surface 376 (1997) L429

I. Kardinal, F.P. Netzer and M.G. Ramsey, A multiplicity of CN bonding configurations on Ni(110) 376 (1997) 229

H. He, Y. Okawa and K. Tanaka, Hydrogenation of carbidic carbon on the Ni(100) surface 376 (1997) 310

Electron microscopy

T. Doi, H. Nakahara, M. Ichikawa and S. Hosoki, Observation of Si(111) surface steps from scanning microscope images of the sample absorption current 376 (1997) 87

Scanning electron microscopy (SEM)

P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403

Electron–solid diffraction

B.H. Müller, Th. Schmidt and M. Henzler, Growth and melting of a Pb monolayer on Cu(111) 376 (1997) 123

M. Kottcke and K. Heinz, A new approach to automated structure optimization in LEED intensity analysis 376 (1997) 352

Low energy electron diffraction (LEED)

M.A. Kulakov, H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1 × 1–7 × 7 surface phase transition 376 (1997) L414

G. Neuhold, L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1

L. Nedelmann, B. Müller, B. Fischer, K. Kern, D. Erdös, J. Wollschläger and M. Henzler, A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100) 376 (1997) 113

B.H. Müller, Th. Schmidt and M. Henzler, Growth and melting of a Pb monolayer on Cu(111) 376 (1997) 123

M. Parschau, D. Schlatterbeck and K. Christmann, Nucleation and growth of silver films on a rhenium (0001) surface: a combined STM and LEED study 376 (1997) 133

H. Over, S. Schwegmann, G. Ertl, D. Cvetko, V. De Renzi, L. Floreano, R. Gotter, A. Morgante, M. Peloi, F. Tommasini and S. Zennaro, Temperature behavior of the $(\sqrt{3}\times\sqrt{3})$R30°-1CO and the (2 × 2)-3CO overlayers on Rh(111): a combined HAS and LEED investigation 376 (1997) 177

H.A. Yoon, N. Materer, M. Salmeron, M.A. Van Hove and G.A. Somorjai, Coverage-dependent structures of sulfur on Pt(111) studied by low-energy electron diffraction (LEED) and scanning tunneling microscopy (STM) 376 (1997) 254

M. Kottcke, B. Dötsch, L. Hammer, K. Heinz, K. Müller and D.M. Zehner, Deep layer oscillatory segregation and relaxation of substitutionally disordered $Mo_xRe_{1-x}(100)$ surfaces 376 (1997) 319
M. Kottcke and K. Heinz, A new approach to automated structure optimization in LEED intensity analysis 376 (1997) 352

Reflection high-energy electron diffraction (RHEED)

A.R. Avery, E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397
C.-S. Jiang, X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69
T. Doi, H. Nakahara, M. Ichikawa and S. Hosoki, Observation of Si(111) surface steps from scanning microscope images of the sample absorption current 376 (1997) 87
H. Oigawa, M. Wassermeier, J. Behrend, L. Däweritz and K.H. Ploog, Reconstruction of the GaAs(001) surface induced by submonolayer Be deposition 376 (1997) 185

Field emission microscopy

N.S. Xu and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Laser methods

Laser annealing

X.H. Chen, J.C. Polyani and D. Rogers, Photoetching of Si(111)-(7 × 7) studied by STM 376 (1997) 77

Laser induced thermal desorption (LITD)

R.W. Verhoef and M. Asscher, Effect of lateral interactions on coverage grating formation on surfaces 376 (1997) 389
R.W. Verhoef and M. Asscher, Diffusion on surfaces using laser diffraction: effect of adsorbate lateral interactions 376 (1997) 395

Molecular beam epitaxy

A.R. Avery, E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397
G. Neuhold, L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1
L. Nedelmann, B. Müller, B. Fischer, K. Kern, D. Erdös, J. Wollschläger and M. Henzler, A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100) 376 (1997) 113
H. Oigawa, M. Wassermeier, J. Behrend, L. Däweritz and K.H. Ploog, Reconstruction of the GaAs(001) surface induced by submonolayer Be deposition 376 (1997) 185

Non-linear optical methods

Second harmonic generation

R.W. Verhoef and M. Asscher, Effect of lateral interactions on coverage grating formation on surfaces 376 (1997) 389
R.W. Verhoef and M. Asscher, Diffusion on surfaces using laser diffraction: effect of adsorbate lateral interactions 376 (1997) 395

Photoelectron spectroscopy

Angle resolved photoemission

T. Miller, E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32
R. Courths, S. Hüfner, P. Kemkes and G. Wiesen, Electronic structure investigation of Cu(110), Ag(110) and Ni(110) surfaces covered with chemisorbed oxygen up to half a monolayer 376 (1997) 43
C.-S. Jiang, X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69

X-ray photoelectron spectroscopy

C.P. Lund and S.M. Thurgate, Analysis of the $M_{4,5}$-$N_{4,5}N_{4,5}$ spectrum of Ag by Auger photoelectron coincidence spectroscopy 376 (1997) L403
C.-S. Jiang, X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69
M. Tabe and T. Yamamoto, Initial stages of nitridation of Si(111) surfaces: X-ray photoelectron spectroscopy and scanning tunneling microscopy studies 376 (1997) 99

Synchrotron radiation photoelectron spectroscopy

T. Miller, E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32

Photon absorption spectroscopy

X-ray absorption spectroscopy

Y. Baba, K. Yoshii and T.A. Sasaki, Desorption of molecular and atomic fragment-ions from solid CCl4 and SiCl4 by resonant photoexcitation at chlorine K-edge 376 (1997) 330

Scanning tunneling microscopy

A.R. Avery, E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397
M.A. Kulakov, H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1 × 1–7 × 7 surface phase transition 376 (1997) L414
G. Neuhold, L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1

H. Röder, K. Bromann, H. Brune and K. Kern, Strain mediated two-dimensional growth kinetics in metal heteroepitaxy: Ag/Pt(111) 376 (1997) 13
X.H. Chen, J.C. Polyani and D. Rogers, Photoetching of Si(111)-(7 × 7) studied by STM 376 (1997) 77
M. Tabe and T. Yamamoto, Initial stages of nitridation of Si(111) surfaces: X-ray photoelectron spectroscopy and scanning tunneling microscopy studies 376 (1997) 99
L. Nedelmann, B. Müller, B. Fischer, K. Kern, D. Erdös, J. Wollschläger and M. Henzler, A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100) 376 (1997) 113
M. Parschau, D. Schlatterbeck and K. Christmann, Nucleation and growth of silver films on a rhenium (0001) surface: a combined STM and LEED study 376 (1997) 133
H. Oigawa, M. Wassermeier, J. Behrend, L. Däweritz and K.H. Ploog, Reconstruction of the GaAs(001) surface induced by submonolayer Be deposition 376 (1997) 185
J. Han, D. Jeon and Y. Kuk, Surface crystalline gold silicide formation on the Au(100) surface 376 (1997) 237
H.A. Yoon, N. Materer, M. Salmeron, M.A. Van Hove and G.A. Somorjai, Coverage-dependent structures of sulfur on Pt(111) studied by low-energy electron diffraction (LEED) and scanning tunneling microscopy (STM) 376 (1997) 254
A.M. Bittner, J. Wintterlin and G. Ertl, Strain relief during metal-on-metal electrodeposition: a scanning tunneling microscopy study of copper growth on Pt(100) 376 (1997) 267
F.H. Jones, R. Dixon, J.S. Foord, R.G. Egdell and J.B. Pethica, The surface structure of SnO2(110)(4 × 1) revealed by scanning tunneling microscopy 376 (1997) 367
P.J. Knight, S.M. Driver and D.P. Woodruff, Scanning tunnelling microscopy investigation of the oxygen-induced faceting and "nano-faceting" of a vicinal copper surface 376 (1997) 374

Solid phase epitaxy

N. Aizawa, Y. Homma and M. Tomita, Effect of surfactant on Ge crystallization on Si in solid phase epitaxy 376 (1997) L419

Thermal desorption spectroscopy

S. Zhuang, X. Wang, X. Wei, Y. Wang, S. Ren and R. Zhai, The adsorption and reaction of cyclohexanone on the Pt(111) surface 376 (1997) L429
H.H. Huang, X. Jiang, Z. Zou and G.Q. Xu, Interaction of atomic hydrogen with potassium on MgO(100) 376 (1997) 245

X-ray scattering, diffraction, and reflection

M. Strzelczyk, N. Haack, B. Asmussen, J. Süßenbach, W. Press and J.Z. Larese, Structures and phase diagrams of tetramethyltin and tetramethyllead adsorbed on graphite 376 (1997) 339

PHENOMENA

Catalysis

M. Rinnemo, D. Kulginov, S. Johansson, K.L. Wong, V.P. Zhdanov and B. Kasemo, Catalytic ignition in the CO–O2 reaction on platinum: experiment and simulations 376 (1997) 297

Chemisorption

J.C. Okon and C. Joachim, Chemisorption of a Ag atom on a Si(100)2 × 1 surface: local surface deformation 376 (1997) L409
S. Zhuang, X. Wang, X. Wei, Y. Wang, S. Ren and R. Zhai, The adsorption and reaction of cyclohexanone on the Pt(111) surface 376 (1997) L429
R. Courths, S. Hüfner, P. Kemkes and G. Wiesen, Electronic structure investigation of Cu(110), Ag(110) and Ni(110) surfaces covered with chemisorbed oxygen up to half a monolayer 376 (1997) 43
X.H. Chen, J.C. Polyani and D. Rogers, Photoetching of Si(111)-(7 × 7) studied by STM 376 (1997) 77
I. Kardinal, F.P. Netzer and M.G. Ramsey, A multiplicity of CN bonding configurations on Ni(110) 376 (1997) 229

Diffusion and migration

M.A. Kulakov, H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1 × 1–7 × 7 surface phase transition 376 (1997) L414
Z. Chvoj, H. Conrad and V. Cháb, Thermodynamics of adatoms diffusing on a surface with two different sites: a new type of phase transition 376 (1997) 205
I. Jäger, The kinetics of surface segregation in thin films: theoretical considerations and the determination of diffusion data 376 (1997) 219

Electron emission

N.S. Xu and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Energy dissipation

M. Rinnemo, D. Kulginov, S. Johansson, K.L. Wong, V.P. Zhdanov and B. Kasemo, Catalytic ignition in the CO–O2 reaction on platinum: experiment and simulations 376 (1997) 297

Epitaxy

G. Neuhold, L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1
H. Röder, K. Bromann, H. Brune and K. Kern, Strain mediated two-dimensional growth kinetics in metal heteroepitaxy: Ag/Pt(111) 376 (1997) 13
B.H. Müller, Th. Schmidt and M. Henzler, Growth and melting of a Pb monolayer on Cu(111) 376 (1997) 123

M. Parschau, D. Schlatterbeck and K. Christmann, Nucleation and growth of silver films on a rhenium (0001) surface: a combined STM and LEED study 376 (1997) 133
A.M. Bittner, J. Wintterlin and G. Ertl, Strain relief during metal-on-metal electrodeposition: a scanning tunneling microscopy study of copper growth on Pt(100) 376 (1997) 267

Etching

X.H. Chen, J.C. Polyani and D. Rogers, Photoetching of Si(111)-(7 × 7) studied by STM 376 (1997) 77

Faceting

N. Akutsu and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92
P.J. Knight, S.M. Driver and D.P. Woodruff, Scanning tunnelling microscopy investigation of the oxygen-induced faceting and "nano-faceting" of a vicinal copper surface 376 (1997) 374

Field emission

N.S. Xu and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Growth

A.R. Avery, E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397
H. Röder, K. Bromann, H. Brune and K. Kern, Strain mediated two-dimensional growth kinetics in metal heteroepitaxy: Ag/Pt(111) 376 (1997) 13
M. Tabe and T. Yamamoto, Initial stages of nitridation of Si(111) surfaces: X-ray photoelectron spectroscopy and scanning tunneling microscopy studies 376 (1997) 99
B.H. Müller, Th. Schmidt and M. Henzler, Growth and melting of a Pb monolayer on Cu(111) 376 (1997) 123
M. Parschau, D. Schlatterbeck and K. Christmann, Nucleation and growth of silver films on a rhenium (0001) surface: a combined STM and LEED study 376 (1997) 133
P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403

Luminescence

M. Taskinen, M. Sopanen, H. Lipsanen, J. Tulkki, T. Tuomi and J. Ahopelto, Self-organized InAs islands on (100) InP by metalorganic vapor-phase epitaxy 376 (1997) 60

Nucleation

A.R. Avery, E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397
M. Tabe and T. Yamamoto, Initial stages of nitridation of Si(111) surfaces: X-ray photoelectron spectroscopy and scanning tunneling microscopy studies 376 (1997) 99
M. Parschau, D. Schlatterbeck and K. Christmann, Nucleation and growth of silver films on a rhenium (0001) surface: a combined STM and LEED study 376 (1997) 133
J. Han, D. Jeon and Y. Kuk, Surface crystalline gold silicide formation on the Au(100) surface 376 (1997) 237
P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403

Oxidation

A. Böttcher, S. Fichtner-Endruschat and H. Niehus, Surface electronic properties of Cs-fullerides 376 (1997) 151

Photochemistry

X.H. Chen, J.C. Polyani and D. Rogers, Photoetching of Si(111)-(7 × 7) studied by STM 376 (1997) 77
Y. Baba, K. Yoshii and T.A. Sasaki, Desorption of molecular and atomic fragment-ions from solid CCl4 and SiCl4 by resonant photoexcitation at chlorine K-edge 376 (1997) 330

Photoelectron emission

T. Miller, E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32
N.S. Xu and R.V. Latham, Relaxation of UV photon-stimulated field electron emission from particulate-based emission regimes 376 (1997) 411

Physical adsorption

M. Strzelczyk, N. Haack, B. Asmussen, J. Süßenbach, W. Press and J.Z. Larese, Structures and phase diagrams of tetramethyltin and tetramethyllead adsorbed on graphite 376 (1997) 339

Self-assembly

M. Taskinen, M. Sopanen, H. Lipsanen, J. Tulkki, T. Tuomi and J. Ahopelto, Self-organized InAs islands on (100) InP by metalorganic vapor-phase epitaxy 376 (1997) 60

Sputtering

M. Tanemura, T. Aoyama, A. Otani, M. Ukita, F. Okuyama and T.K. Chini, Angular distribution of In and P particles sputtered from InP by inert-gas ion bombardment 376 (1997) 163

Surface chemical reaction

L.N. Kantorovich and M.J. Gillan, The energetics of N2O dissociation on CaO(001) 376 (1997) 169
H. He, Y. Okawa and K. Tanaka, Hydrogenation of carbidic carbon on the Ni(100) surface 376 (1997) 310

Surface diffusion

M.A. Kulakov, H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1 × 1–7 × 7 surface phase transition 376 (1997) L414

Z. Chvoj, H. Conrad and V. Cháb, Thermodynamics of adatoms diffusing on a surface with two different sites: a new type of phase transition 376 (1997) 205
R.W. Verhoef and M. Asscher, Diffusion on surfaces using laser diffraction: effect of adsorbate lateral interactions 376 (1997) 395
P.A. Mulheran and J.A. Blackman, Simulation and theory of island growth on substrate steps 376 (1997) 403
M.R. Dudek and J. Bęben, Surface strip spreading for repulsive adatoms 376 (1997) 418

Surface electrical transport (surface conductivity, surface recombination, etc.)

C.-S. Jiang, X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69

Surface electronic phenomena (work function, surface potential, surface states, etc.)

L. Jurczyszyn and M. Stęślicka, A new approach to the study of electronic properties of image resonances at clean and Na-covered Al(001) surfaces 376 (1997) L424
T. Miller, E.D. Hansen, W.E. McMahon and T.-C. Chiang, Direct transitions, indirect transitions, and surface photoemission in the prototypical system Ag(111) 376 (1997) 32
C.-S. Jiang, X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69
A. Böttcher, S. Fichtner-Endruschat and H. Niehus, Surface electronic properties of Cs-fullerides 376 (1997) 151

Surface melting

B.H. Müller, Th. Schmidt and M. Henzler, Growth and melting of a Pb monolayer on Cu(111) 376 (1997) 123
M. Strzelczyk, N. Haack, B. Asmussen, J. Süßenbach, W. Press and J.Z. Larese, Structures and phase diagrams of tetramethyltin and tetramethyllead adsorbed on graphite 376 (1997) 339
P.J. Knight, S.M. Driver and D.P. Woodruff, Scanning tunnelling microscopy investigation of the oxygen-induced faceting and "nano-faceting" of a vicinal copper surface 376 (1997) 374

Surface relaxation and reconstruction

J.C. Okon and C. Joachim, Chemisorption of a Ag atom on a Si(100)2 × 1 surface: local surface deformation 376 (1997) L409
H. Oigawa, M. Wassermeier, J. Behrend, L. Däweritz and K.H. Ploog, Reconstruction of the GaAs(001) surface induced by submonolayer Be deposition 376 (1997) 185
A.M. Bittner, J. Wintterlin and G. Ertl, Strain relief during metal-on-metal electrodeposition: a scanning tunneling microscopy study of copper growth on Pt(100) 376 (1997) 267
M. Kottcke, B. Dötsch, L. Hammer, K. Heinz, K. Müller and D.M. Zehner, Deep layer oscillatory segregation and relaxation of substitutionally disordered Mo_xRe_{1-x} (100) surfaces 376 (1997) 319

Surface roughening

N. Akutsu and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92

Surface segregation

M. Kottcke, B. Dötsch, L. Hammer, K. Heinz, K. Müller and D.M. Zehner, Deep layer oscillatory segregation and relaxation of substitutionally disordered Mo_xRe_{1-x} (100) surfaces 376 (1997) 319

Surface stress

L. Nedelmann, B. Müller, B. Fischer, K. Kern, D. Erdös, J. Wollschläger and M. Henzler, A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100) 376 (1997) 113

Surface structure, morphology, roughness, and topography

A.R. Avery, E.S. Tok and T.S. Jones, An STM study of the nature of the transitional phase of the GaAs(111) B surface 376 (1997) L397
M.A. Kulakov, H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1 × 1–7 × 7 surface phase transition 376 (1997) L414
G. Neuhold, L. Bartels, J.J. Paggel and K. Horn, Thickness-dependent morphologies of thin Ag films on GaAs(110) as revealed by LEED and STM 376 (1997) 1
M. Taskinen, M. Sopanen, H. Lipsanen, J. Tulkki, T. Tuomi and J. Ahopelto, Self-organized InAs islands on (100) InP by metalorganic vapor-phase epitaxy 376 (1997) 60
C.-S. Jiang, X. Tong, S. Hasegawa and S. Ino, Electrical conduction through the surface-state band of the Si(111)-$\sqrt{21} \times \sqrt{21}$-(Ag + Au) structure 376 (1997) 69
T. Doi, H. Nakahara, M. Ichikawa and S. Hosoki, Observation of Si(111) surface steps from scanning microscope images of the sample absorption current 376 (1997) 87
N. Akutsu and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92
L. Nedelmann, B. Müller, B. Fischer, K. Kern, D. Erdös, J. Wollschläger and M. Henzler, A comparative STM and SPA-LEED study on the evolution of strain induced stripe pattern on Cu/Ni(100) 376 (1997) 113
H.A. Yoon, N. Materer, M. Salmeron, M.A. Van Hove and G.A. Somorjai, Coverage-dependent structures of sulfur on Pt(111) studied by low-energy electron diffraction (LEED) and scanning tunneling microscopy (STM) 376 (1997) 254

M. Strzelczyk, N. Haack, B. Asmussen, J. Süßenbach, W. Press and J.Z. Larese, Structures and phase diagrams of tetramethyltin and tetramethyllead adsorbed on graphite 376 (1997) 339

M. Kottcke and K. Heinz, A new approach to automated structure optimization in LEED intensity analysis 376 (1997) 352

F.H. Jones, R. Dixon, J.S. Foord, R.G. Egdell and J.B. Pethica, The surface structure of SnO2(110)(4 × 1) revealed by scanning tunneling microscopy 376 (1997) 367

P.J. Knight, S.M. Driver and D.P. Woodruff, Scanning tunnelling microscopy investigation of the oxygen-induced faceting and "nano-faceting" of a vicinal copper surface 376 (1997) 374

Surface thermodynamics (including phase transitions)

M.A. Kulakov, H. Hoster, Z. Zhang and B. Bullemer, Cooling rate determination of Si samples in a radiative quench and observation of an apparent temperature shift of the 1 × 1–7 × 7 surface phase transition 376 (1997) L414

N. Akutsu and Y. Akutsu, Step stiffness and equilibrium island shape of Si(100) surface: statistical–mechanical calculation by the imaginary path weight random-walk method 376 (1997) 92

H. Over, S. Schwegmann, G. Ertl, D. Cvetko, V. De Renzi, L. Floreano, R. Gotter, A. Morgante, M. Peloi, F. Tommasini and S. Zennaro, Temperature behavior of the $(\sqrt{3} \times \sqrt{3})R30°$-1CO and the (2 × 2)-3CO overlayers on Rh(1 1): a combined HAS and LEED investigation 376 (1997) 177

Vibrations of adsorbed molecules

S. Zhuang, X. Wang, X. Wei, Y. Wang, S. Ren and R. Zhai, The adsorption and reaction of cyclohexanone on the Pt(111) surface 376 (1997) L429

F. Illas, S. Zurita, A.M. Márquez and J. Rubio, On the bonding mechanism of CO to Pt(111) and its effect on the vibrational frequency of chemisorbed CO 376 (1997) 279